REMARKS

The present invention is directed to immunogenic compositions comprising fibroblast growth factor and/or vascular endothelial growth factor, to methods for treating cancer or hyperproliferative disorders in humans or animals, and also to methods for treating humans or animals in need of an immune response to a growth factor.

Claims 4-29 were pending prior to the issuance of the March 14, 2001 office action. In response to the office action and in order to facilitate prosecution, Claims 5-7, 11, 15-17, 21 and 25 have been amended and Claims 4, 14, 24 have been cancelled without prejudice or disclaimer. Accordingly, following entry of this amendment, Claims 5-13, 15-23 and 25-29 will be pending. No new matter has been added and support for the claims in found in the specification.

1. Rejection of Claims 5, 15 and 25 under 35 U.S.C. §112

In the office action dated March 14, 2001, Claims 5, 15, and 25 were rejected under 35 U.S.C. §112, second paragraph, as being vague and indefinite because according to the Examiner, the claims are drawn to products which "correspond" to a structure. The term "correspond" was objected to because it does not indicate what the structure is and thus the metes and bounds of the claimed product cannot be determined. The Examiner requested that "corresponds" by replaced by "consists of". In order to facilitate prosecution, Applicants have herein requested amendment of Claims 5, 15, and 25 by replacement of "corresponds" with "consists of". Reconsideration and withdrawal of the rejection is therefore respectfully requested.

2. Rejection of Claims 6 and 16 under 35 U.S.C. §112

Claim 6 was objected to under 35 U.S.C. §112, second paragraph, as being vague and indefinite because according to the Examiner, it is drawn to a composition comprising SEQ ID NO:1 and SEQ ID NO:2. The Examiner has requested that "and" by replaced by "or". In order to facilitate prosecution, Applicants have herein requested amendment of Claim 6 replacing "and" with "or". Reconsideration and withdrawal of the rejection is therefore respectfully requested.

Claim 16 was objected to under 35 U.S.C. §112, second paragraph, as being vague and indefinite because according to the Examiner, it is drawn to a composition comprising SEQ ID NOS: 3-9. The Examiner has requested that "SEQ ID NOS: 3-9" be replaced by "SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8 or SEQ ID NO: 9". Pursuant to the Examiner's request, Applicants have herein requested amendment of Claim 16 replacing "SEQ ID NOS: 3-9" with "SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8 or SEQ ID NO: 9". Reconsideration and withdrawal of the rejection is therefore respectfully requested.

3. Rejection of Claims 4, 5, 14, 15, 24 and 25 under 35 U.S.C. §112

Claims 4, 5, 14, 15, 24 and 25 were rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor, at the time the application was filed, had possession of the claimed invention. According to the Examiner, each of the claimed compositions encompasses a genus of products which is not supported in scope by the examples and teachings provided by the disclosure of the specification. More specifically, the Examiner stated that the specification only provides adequate descriptive support for a claimed genus of immunogenic compositions wherein the immunogenic peptide has a structure other than a peptide consisting of either SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8 or SEQ ID NO: 9.

In order to facilitate prosecution, Applicants have herein requested amendment of the claims canceling Claims 4, 14, and 24. In addition, Applicants have herein amended Claims 5, 15 and 25 adding language that further defines the invention, specifically by identifying the immunogenic peptide of FGF as being one that consists of the heparin binding domain, and immunogenic peptide of VEGF as being one that consists of the receptor binding domain. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

4. Rejection of Claims 4, 7, and 8 under 35 U.S.C. §102(b)

Claims 4, 7, and 8 were rejected under 35 U.S.C. §102 as being anticipated by Kardami et al. (Kardami et al., Growth Factors, 4:69-80 (1990)). According to the Examiner, Kardami et al. teach the invention as described in Claim 4 because they describe a fragment of bFGF (amino acids 1-24) conjugated to keyhole limpet hemocyanin used to generate rabbit immune sera.

Applicants have herein requested cancellation of Claim 4 and further defined the invention of Claim 5 as an immunogenic composition comprising a immunogenic peptide of FGF consisting of the heparin binding domain. Kardami et al. fail to disclose the invention as claimed herein by the Applicants, therefore reconsideration and withdrawal of the rejection is respectfully requested.

5. Rejection of Claims 4-6 under 35 U.S.C. §102(b)

Claims 4-6 were rejected under 35 U.S.C. §102 as being anticipated by EP281822 (European Patent Application, Takeda Chemical Industries, Ltd. Senoo, M. et al. (1988)). According to the Examiner, EP281822 teaches the invention as described in Claim 4-6 because it teaches immunization of mice with an FGF mutein combined with Freund's complete adjuvant which results in the production of monoclonal antibodies.

Applicants respectfully submit that since Claim 4 has been cancelled and Claim 5 and 6 have been amended to claim immunogenic compositions comprising a immunogenic peptide of FGF consisting of the heparin binding domain, compositions not disclosed by Senoo et al., this rejection is no longer applicable and is therefore moot. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

6. Rejection of Claims 4-29 under the Doctrine of Double Patenting

The Examiner rejected the pending claims as unpatentable over the issued claims in U.S. Patent No. 5,919,459. The Examiner stated that although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in U.S. Patent No. 5,919,459 are broadly drawn to compositions comprising fragments of FGF and VEGF.

MPEP §706.02(b) provides that a rejection based on 35 U.S.C. §102(b) can be overcome by perfecting priority under 35 U.S.C. §119(e) or 120 by amending the specification of the

application to contain specific reference to a prior application in accordance with 37 C.F.R. §1.78(a). Pursuant to the provisions of 35 U.S.C. §120, since the present application was filed prior to the issuance of U.S. Patent No. 5,919,459, and since at least common inventor is named for both the Patent and the present application, (John Holaday, Ph.D.) Applicants have herein requested amendment of the specification to contain specific reference to the prior application in accordance with 37 C.F.R. §1.78(a).

In light of the above-discussed amendment to the specification, reconsideration and withdrawal of the rejection is therefore respectfully requested.

7. Rejection of Claims 4-29 under 35 U.S.C. §103(a)

The Examiner rejected the pending claims as being obvious over U.S. Patent No. 5,919,459. Since the issued patent and the present application have a common inventor, the Examiner suggested submission of a declaration under 37 C.F.R. §1.132 showing that any invention disclosed but not claimed in the reference was derived by the inventor of this application and is thus not the invention "by another". Pursuant to the Examiner's suggestion, Applicants provide herewith a declaration by John W. Holaday, Ph.D. in accordance with 37 C.F.R. §1.132 showing that any invention disclosed but not claimed in the reference was derived by the inventor of this application and is thus not the invention "by another".

In light of Dr. Holaday's declaration, Applicants request reconsideration and withdrawal of this rejection.

Conclusion

In light of the amendments Applicants are of the opinion that Claims 4-49 are now in condition for allowance. Such action is respectfully requested. If the Examiner believes any informalities remain in the application which may be corrected by Examiner's Amendment, or there are any other issues which can be resolved by telephone interview, a telephone call to the undersigned attorney at (404) 745-2463 is respectfully solicited.

Respectfully submitted,

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